

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A martensitic stainless steel with high strength and high corrosion resistance comprising less than ~~0.06~~ 0.035 wt.% C, less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 2.0-6.0 wt.% Ni, 13.0-19.0 wt.% Cr, 0.5-6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities, wherein the content of Cr_{23}C_6 is minimized.
2. (Original) A martensitic stainless steel of claim 1 further comprising at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.
3. (Previously Presented) A martensitic stainless steel with high strength and high corrosion resistance comprising less than 0.035 wt.% C, less than 2.0 wt.% Si, less than 2.0 wt.% Mn, 2.0-4.5 wt.% Ni, 13.0-16.0 wt.% Cr, 0.5-4.5 wt.% W, less than 2.5 wt.% Mo, less than 0.3 wt.% Nb, less than 0.3 wt.% V, less than 2.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities, wherein the content of Cr_{23}C_6 is minimized.
4. (Original) A martensitic stainless steel of claim 3 further comprising at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.

5. (Currently Amended) A method for manufacturing a martensitic stainless steel with high strength and high corrosion resistance comprising the steps of:

casting a stainless steel that comprises less than ~~0.06~~ 0.035 wt.% C, less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 2.0-6.0 wt.% Ni, 13.0-19.0 wt.% Cr, 0.5-6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities, wherein the content of Cr_{23}C_6 is minimized; and

submitting the cast stainless steel to an austenization heat treatment at a temperature of 800-1150°C and tempering the stainless steel at a temperature of 350-575°C.

6. (Original) A method of claim 5 wherein the stainless steel further comprises at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.

7. (Currently Amended) A method for manufacturing a martensitic stainless steel with high strength and high corrosion resistance comprising the steps of:

casting a stainless steel that comprises less than ~~0.06~~ 0.035 wt.% C, less than 2.5 wt.% Si, less than 2.5 wt.% Mn, 2.0-6.0 wt.% Ni, 13.0-19.0 wt.% Cr, 0.5-6.0 wt.% W, less than 3.5 wt.% Mo, less than 0.5 wt.% Nb, less than 0.5 wt.% V, less than 3.0 wt.% Cu, 0.11-0.25 wt.% N, and the remainder being Fe and minor impurities, wherein the content of Cr_{23}C_6 is minimized;

mechanically-processing the stainless steel such that work hardening is generated in the stainless steel; and

submitting the mechanically-processed stainless steel to an austenization heat treatment at a temperature of 800-1150°C and tempering the stainless steel at a temperature of 350-575°C.

8. (Original) A method of claim 7 wherein the stainless steel further comprises at least one of less than 0.8 wt.% Ti and/or 1.0 wt.% Ta.